

Micro Commercial Components

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1N4448W

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- Surface Mount Package Ideally Suited for Automatic Insertion Lead Free Finish/RoHS Compliant ("P" Suffix
- designates RoHS Compliant. See ordering information)

Mechanical Data

- Marking Code: T5
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Maximum Ratings @ 25° C Unless Otherwise Specified

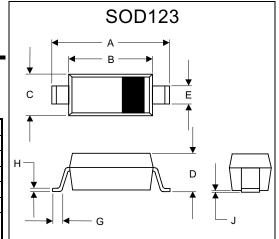
| Reverse Voltage | V_R | 75 | V |
|----------------------------|-------------------|-------------|------|
| Peak Reverse Voltage | V_{RM} | 100 | V |
| Average Rectified Current | Ь | 250 | mA |
| Peak Forward Surge Current | I _{FSM} | 2 | Α |
| Power Dissipation | P_{D} | 500 | mW |
| Thermal Resistance* | R | 35 | °C/W |
| Operation/Storage Temp. | T_i , T_{STG} | -55 to +150 | °C |
| Range | | | |

Electrical Characteristics @ 25° C Unless Otherwise Specified

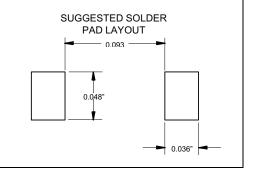
| Maximum Instantaneous Forward Voltage | V _F | 1.0V | I _{FM} = 100mA; T _J = 25°C (Note 1) |
|---------------------------------------------------------|-----------------|-----------------------|-------------------------------------------------------------------|
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I _R | 25nA 50μA 2.5uA | V_R =20Volts T_J = 25°C T_J = 150°C V_R =75Volts |
| Typical Junction Capacitance | CJ | 4pF | Measured at 1.0MHz, V _R =4.0V |
| Reverse Recovery Time | T _{rr} | 4nS | $I_F=10\text{mA}$ $V_R=6V$ $R_L=100\Omega$ |

Note: 1. Valid provided that terminals are kept at ambient temperature

500mW 100 Volts **Switching Diode**



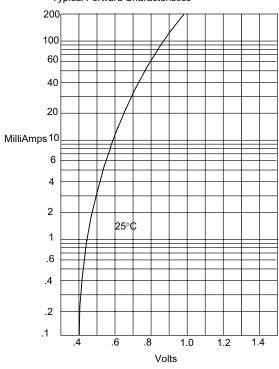
| DIMENSIONS | | | | | |
|------------|--------|------|------|------|------|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | |
| Α | .140 | .152 | 3.55 | 3.85 | |
| В | .100 | .112 | 2.55 | 2.85 | |
| С | .055 | .071 | 1.40 | 1.80 | |
| D | | .053 | | 1.35 | |
| Е | .012 | .031 | 0.30 | .78 | |
| G | .006 | | 0.15 | | |
| Н | | .01 | | .25 | |
| J | | .006 | | .15 | |



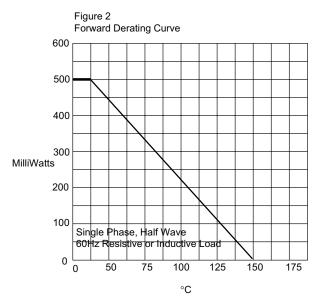
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Figure 1
Typical Forward Characteristics

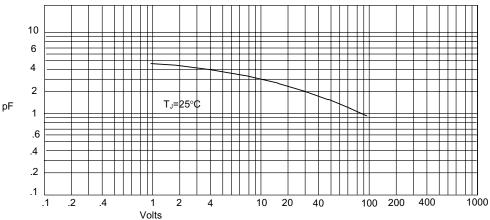


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Admissable Power Dissipation - MilliWattsversus Ambient Temperature -°C





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Figure 4
Typical Reverse Characteristics

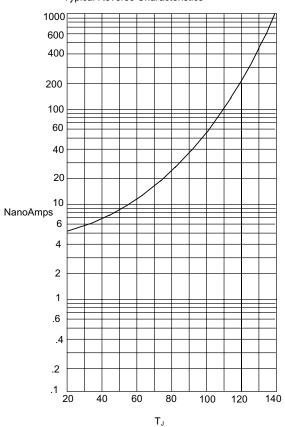


Figure 5 Peak Forward Surge Current 500 400 300 MilliAmps 200 100 0 2 4 6 8 10 20 60 80 100 Cycles

Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

T_A=25°C T_A=100°C

Instantaneous Reverse Leakage Current - NanoAmperes/ersus Junction Temperature - $^{\circ}\text{C}$



Ordering Information

| Device | Packing |
|------------------|---------------------|
| (Part Number)-TP | Tape&Reel3Kpcs/Reel |

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